

Jason Roberts, MPH Vermont Center for Health Statistics April, 2011



Introduction

The Vermont Healthier Living Workshop (HLW) is a six-week program during which participants with chronic diseases learn to better manage their conditions. This workshop is licensed by Stanford University.

The workshops are facilitated by two leaders with chronic conditions who have been trained in a four-day program by Stanford-certified master trainers. Groups meet once a week for six weeks. Each weekly session is two and a half hours long.

The HLW empowers individuals as self-managers through education, support and skill-building exercises, notably, goal-setting and problem-solving.

Some of the topics covered are:

- Techniques to deal with problems such as frustration, fatigue, pain and isolation
- Breathing techniques and guided imagery to reduce stress
- · Exercise for improving and maintaining strength, flexibility, and endurance
- Taking medications and lessening their side effects
- Communicating with family, friends, and health professionals
- Healthy eating
- Evaluating health treatments

Participants fill out a baseline questionnaire during their first class. The Blueprint for Health at The Department of Vermont Health Access sends follow-up questionnaires to participants at six and twelve months after the program ends. These questionnaires measure how well respondents are able to manage their conditions both before and after their attendance.

Questionnaire Completion Rate and Response Rate

This report includes data from November, 2004 through December, 2010. There have been 2,073 participants who have completed* the Vermont HLW and the baseline questionnaire since October 2004.

This report reflects baseline questionnaires for 1,541 HLW participants – or all those who completed the HLW workshop and baseline survey and were eligible for follow-up by the end of December, 2010. Of those eligible to complete a follow-up questionnaire, we have received 589 six month and 470 12 month follow-ups.

This report presents data from the 1,541 baseline questionnaires and 470 12 month follow-up questionnaires we received through 12/2010. This represents roughly a 30% response rate.

Participants who completed* the HLW course and a:				
	Baseline Questionnaire	6 month follow-up	12 month follow-up	
2005 & Earlier	118	66	62	
2006	192	97	87	
2007	248	110	90	
2008	394	132	58	
2009	589	184	173	
2010 (Jan-June)	263	107		
2010 (July-Dec)	284			

^{*}A participant must attend 4 or more HLW sessions to be considered as "completing" the HLW workshop.

Survey Demographics at Baseline and 12 month

Of those who fill out the baseline survey, four out of five are women. One-third are 70 or older (33%) and another one-quarter are between 60 and 69 (28%). Over half have at least some college education (55%). Nearly two-thirds rate their overall health as good, very good or excellent (66%), one-third rate their health as fair or poor.

At 12 month, survey respondents are slightly more female (+5%) and slightly older (+9%, 70 or older).

Despite an older and more female population, those who rate their overall health as good or better also increases slightly at 12 month – up four percent.

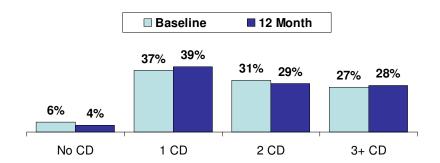
In terms of education level, respondents at baseline and at 12 month have similar levels of education.

	Baseline	12 Month
Gender: Female	80%	85%
Male	20%	15%
Age: 16-49	18%	15%
50-59	21%	19%
60-69	28%	24%
70-79	20%	30%
80+	13%	12%
Education		
High School or less	45%	42%
Some College	26%	27%
College+	29%	31%
General Health		
Excellent/Very Good	23%	21%
Good	43%	49%
Fair/Poor	35%	30%

Chronic Disease Among HLW Participants

A majority of HLW participants indicated they have two or more chronic conditions. One-third have one chronic disease. A few participants did not list a chronic condition. These numbers are similar among those who filled out a baseline and among those who completed a 12 month survey.

Arthritis is the most commonly indicated chronic disease, with half of respondents indicating that they suffer from some form of arthritis. High blood pressure, depression and back/neck pain are the next most common conditions.



Condition	Baseline	12 Month
Arthritis	47%	51%
Diabetes	29%	29%
Heart Disease	22%	23%
Asthma	15%	16%
High Blood Pressure*		5%
Cancer	9%	10%
Depression*		2%
Back/Neck Pain*		9%
Other Mental Health Issues	14%	9%
Fibromyalgia*		9%
Emphysema	6%	7%
Lung Disease	5%	6%

^{*} Asked after November, 2009

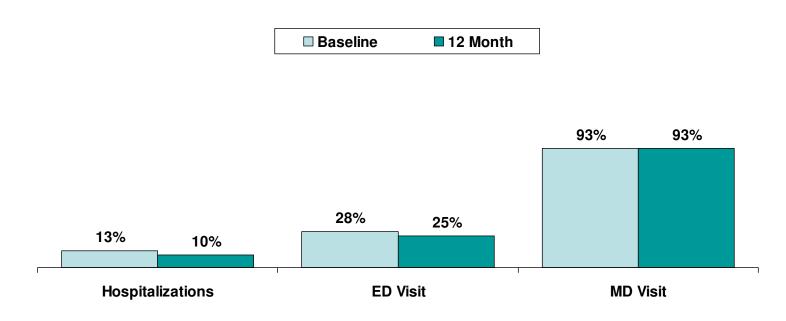
Hospitalization, ED and MD Visits In The Past Six Months

The proportion of respondents who report a hospitalization in the last six months decreased from 13% at baseline to 10% at 12 month follow-up.

The proportion of respondents who report a visit to an Emergency Department (ED) in the last six months at baseline was 28%. In the 12 month follow-up that proportion declines slightly to 25%.

The proportion who report at least one MD visit in the last six months was 93% for both baseline and 12 month follow-up.

None of these differences are statistically significant.

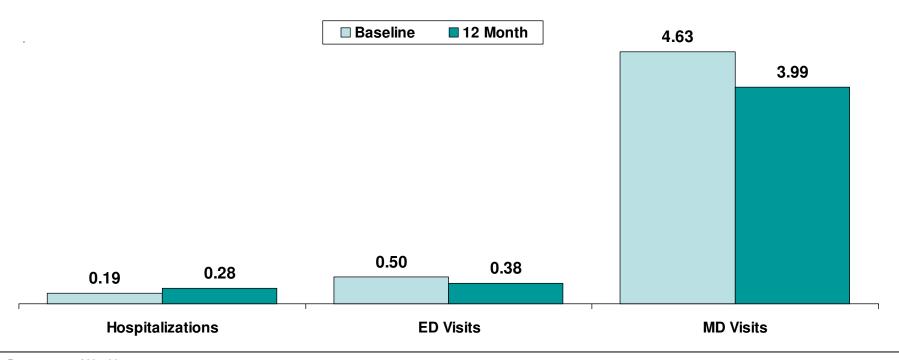


Hospitalization, ED and MD Visits In The Past Six Months

Hospitalizations in the past six months increased from 0.19 at baseline to 0.28 at 12 month follow-up. This was not a significant increase

ED visits in the past six months significantly decreased from baseline to 12 month follow-up overall, among those younger than 60 (0.67 vs. 0.40) and those with two or more chronic conditions (0.70 vs. 0.40).

The average number of MD visits in the past six months dropped from baseline to 12 month follow-up, but not significantly. Respondents younger than 60 did have a significant decline in MD visits (5.6 vs. 4.1).

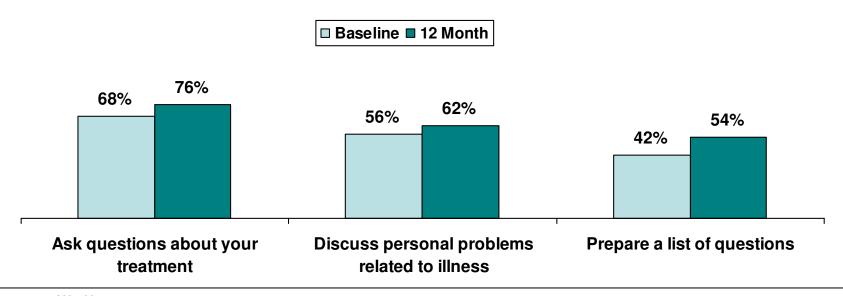


Preparation for Doctor Visits

Prior to participating in the HLW, two out of three respondents report they asked questions about their treatment fairly often, very often or always. One year later, that number has increased to three out of four respondents. A majority also report they would discuss personal problems with their doctor prior to HLW. Nearly two out of three said they do so a year later.

While just two out of five respondents prepared a list of questions for their doctor prior to taking HLW, a majority report doing so one year later.

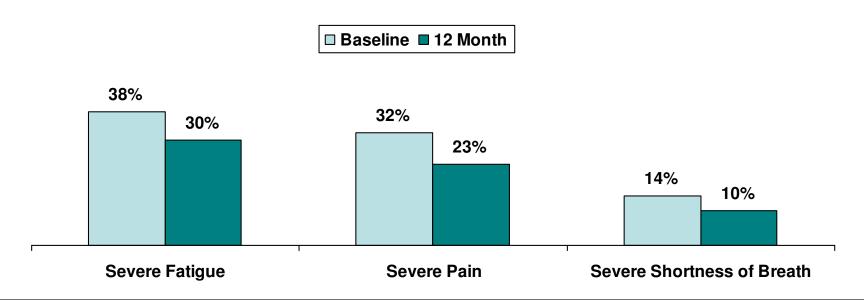
These are all statistically significant increases.



Symptoms in the Past Two Weeks

Respondents report fewer adverse feelings and symptoms due to their conditions. There were *significant decreases* in the proportion of respondents who report severe symptoms in the two weeks prior to taking each survey.

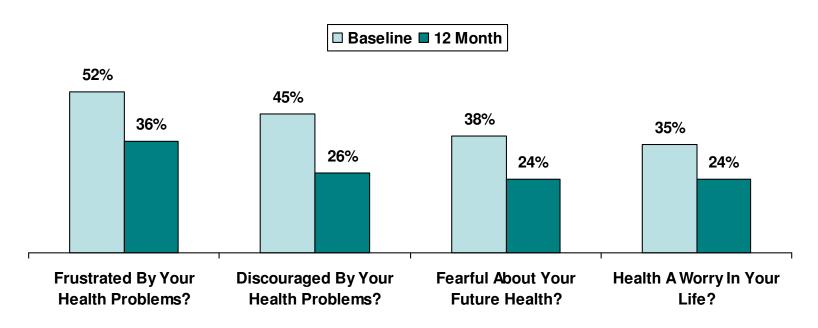
Those who rated the severity of their fatigue and/or pain as a 7 or higher (on a 10-point scale) declined significantly from baseline reporting to the 12 month survey. Those who reported severe fatigue declined eight points; severe pain declined nine points. Reports of shortness of breath also declined, though not significantly.



Impact of Health Problems on Overall Outlook

There were also *significant decreases* in the proportion of respondents who felt frustrated, discouraged, fearful or worried about their health when comparing baseline responses to 12 month follow-up responses.

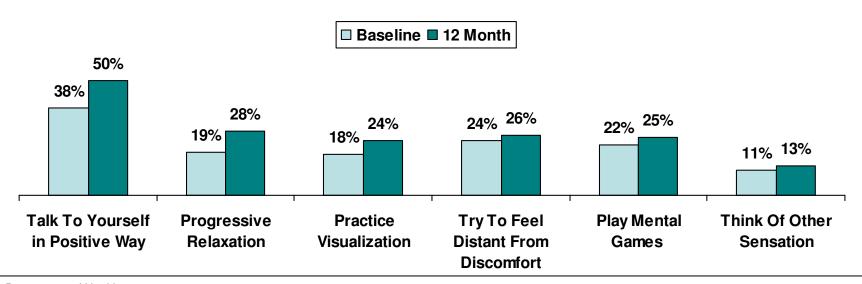
The graph below shows the proportion of respondents who indicate they felt each of the following "all", "most" or "some" of the time in the past month. The proportion who report being frustrated dropped 16 points, those who report being discouraged dropped nineteen points, those that report being fearful dropped 14 points and those who report health is a worry in their life dropped 11 points. All of these shifts represent statistically significant decreases.



Mechanisms for Coping with Symptoms

Prior to completing the HLW, just more than a third of participants reported they *often* used positive self-talk as a way of coping with their symptoms; while one in five reported using progressive relaxation or visualization. In the 12 month follow-up, half of respondents report using positive self-talk as a coping mechanism, more than a quarter report using progressive relaxation and almost a quarter practice visualization. These are all statistically significant improvements.

Other mechanisms, such as distancing ones' self from discomfort, playing mental games and thinking of other sensations showed slight increases; but not significant.

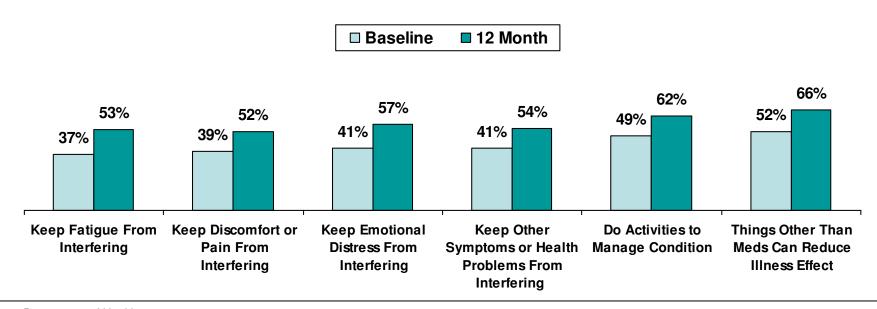


Confidence About Doing Things

At the 12 month follow-up, participants are more confident that fatigue, discomfort or pain, emotional distress and other health problems will not interfere with things they want to do.

There are also increases in the proportion of participants who feel that they can do the different tasks needed to manage their conditions and that they can do more than just take medications to reduce illness effects in everyday life.

These are all statistically significant improvements.

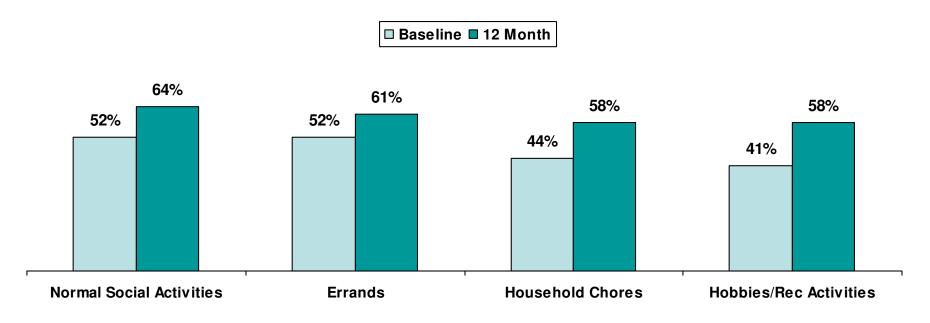


Daily Activities

One year after taking the Healthier Living Workshop, a *significantly larger* proportion of respondents report that their health conditions do not interfere with their daily activities as much as they used to.

For example, while half of survey respondents at baseline said that their health condition only slightly interfered or did not interfere at all with their social activities and/or errands and six out of ten or more reported their health condition was not interfering with those activities in the 12 month survey.

Just more than four out of ten reported their condition was interfering with hobbies and recreational activities or with household chores. Nearly six out of ten report this is the case one year later.



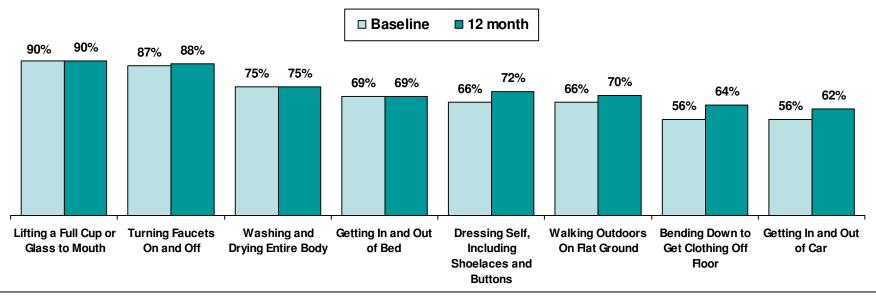
Physical Abilities

From the baseline survey to the 12 month follow-up, an increased number of respondents report being able to perform everyday tasks with just some or no difficulty. Most participants report they could lift a full glass to their mouth and turn on and off faucets. Three-quarters did not have a significant problem washing and drying themselves.

About two-thirds reported having no difficulty or some difficulty with getting in and out of bed, dressing themselves or being able to walk outdoors on flat ground.

A majority are able to bend down to pick up clothes from the floor and get in and out of a car without a significant amount of difficulty.

With the exception of bending down to get clothing off the floor, none of the differences between baseline and 12 month follow-up were significant.

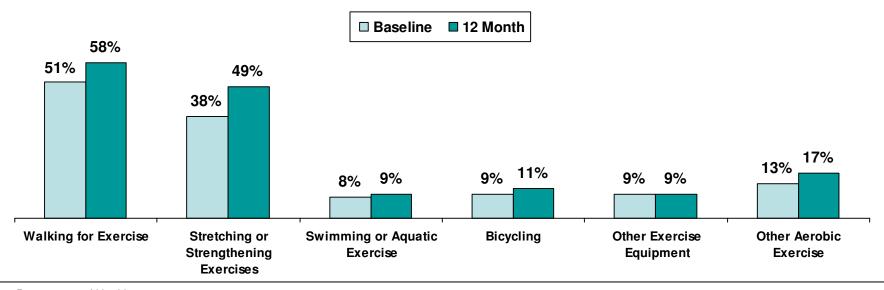


Physical Activity

Walking was and is the most popular physical activity for HLW participants. More than half indicated that they walked for exercise at least 30 minutes a week in the baseline survey. This number increased slightly (not significantly) in the 12 month survey.

Stretching and strengthening exercises show the largest increase one year later. Just less than four in ten participants report they did stretching and strengthening exercises before taking the HLW course. Nearly half report they do so one year later. While a marked improvement, this is not a statistically significant increase.

At baseline, about one in ten respondents report they bike, swim, use aerobic equipment or do some other type of aerobic exercise at least 30 minutes a week. The proportion who report these activities varies little between baseline and 12 month follow-up survey.

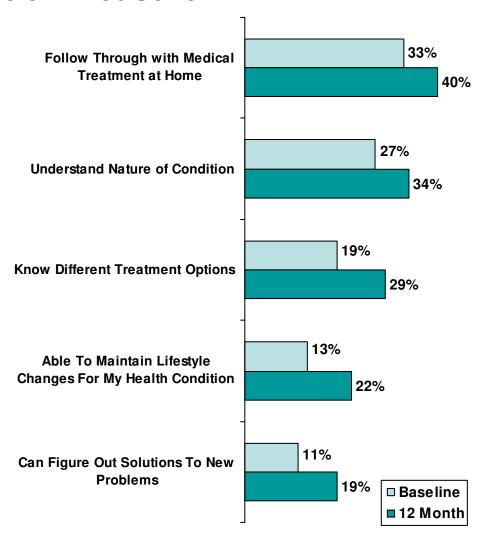


Patient Activation Measure

At 12 month follow-up, many participants show increased confidence in living with and managing their chronic conditions.

Those measures that showed a statistically significant increase in the proportion who agreed with the statement include:

- Being confident that they can follow through with medical treatments at home,
- Can understand the nature of their condition,
- Knowing different treatment options available to them,
- Being able to maintain their lifestyle changes made for their health condition, and
- Confidence they can figure out solutions to new problems.

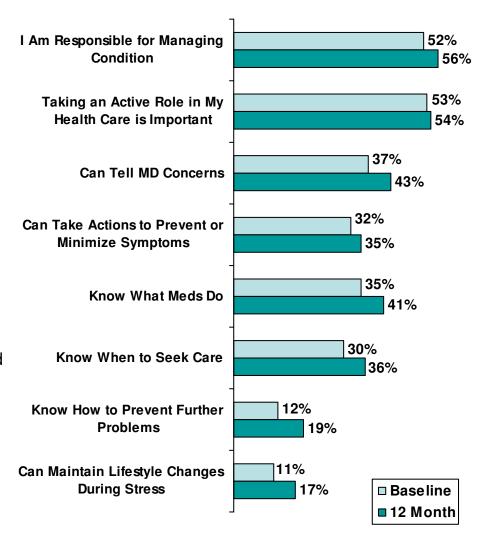


Patient Activation Measure

Other statements also show increases one year after completing the HLW. However, these increases are not statistically significant.

Those measures that did not show a statistically significant increase in the proportion who agreed with the statement include:

- Feeling responsible for managing condition,
- · Taking an active role in my health care
- Can tell MD concerns.
- Taking actions to prevent or minimize symptoms,
- · Knowing what medications do,
- Knowing when to seek care,
- · Maintaining lifestyle changes during stress, and
- Knowing how to prevent further problems,



Conclusion

The results of the HLW evaluation surveys – the baseline and the 12 month follow-up – seem to show that one year after completing the HLW, many respondents are reporting better disease management, improved quality of life, less severity of symptoms and increased confidence in their ability to manage their disease and perform everyday tasks.

For instance, a smaller proportion of respondents reported experiencing severe symptoms in recent weeks at the 12 month survey. A larger proportion reported that their condition was not interfering with daily activities such as errands, chores, hobbies and social activities. Respondents show little variation in the proportion who indicate they can perform various physical tasks (such as lifting a cup, dressing, walking outside, etc.) between the first survey and the 12 month follow-up.

Generally respondents reported being less discouraged or frustrated by their health problems and more confident in their ability to manage their disease. A larger proportion reported utilizing mechanisms for coping with their symptoms than did respondents at baseline.

Medical interventions, such as ED visits, hospitalization and doctor's office visits all declined from baseline to 12 month survey. However, none of the declines are statistically significant. Preparation and participation in doctor's visits – such as preparing a list of questions, asking questions and discussing problems – did significantly increase from baseline surveys to one year later.

The next Healthier Living Workshop follow-up survey report will be delivered in July, 2011 and will include data collected through June, 2011.